

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 H01J49/42

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 H01J

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 576 540 A (JOLLIFFE CHARLES L) 19 November 1996 (1996-11-19)  column 5, last paragraph -column 6 ---	1,15,32, 38,45, 48,52
A	THOMSON B A: "Improved collisionally activated dissociation efficiency and mass resolution on a triple quadrupole mass spectrometer system" ANALYTICAL CHEMISTRY, AMERICAN CHEMICAL SOCIETY, COLUMBUS, US, no. 67, 15 May 1995 (1995-05-15), pages 1696-1704, XP002074941 ISSN: 0003-2700 page 1697, left-hand column, last paragraph  --- -/-	1,15,32, 38,45, 48,52

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

\* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
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- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the international search

30 June 2003

Date of mailing of the international search report

07/07/2003

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Hulne, S

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6 177 668 B1 (HAGER JAMES W) 23 January 2001 (2001-01-23) cited in the application abstract ---	1,15,32, 38,45, 48,52
A	WO 00 33350 A (UNIV BRITISH COLUMBIA ;DOUGLAS DONALD (CA); COLLINGS BRUCE A (CA);) 8 June 2000 (2000-06-08) cited in the application abstract ---	1,15,32, 38,45, 48,52
A	BELOV M E ET AL: "Controlled ion fragmentation in a 2-D quadrupole ion trap for external ion accumulation in ESI FTICR mass spectrometry" JOURNAL OF THE AMERICAN SOCIETY FOR MASS SPECTROMETRY, ELSEVIER SCIENCE INC., NEW YORK, NY, US, vol. 12, no. 12, December 2001 (2001-12), pages 1312-1319, XP004329083 ISSN: 1044-0305 page 1316, right-hand column -----	1,15,32, 38,45, 48,52

## INTERNATIONAL SEARCH REPORT

information on patent family members

International Application No

PCT/CA 03/00478

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5576540	A	19-11-1996	NONE	
US 6177668	B1	23-01-2001	AU 4027699 A	20-12-1999
			WO 9963578 A2	09-12-1999
			EP 1084507 A2	21-03-2001
			JP 2002517888 T	18-06-2002
			AU 718774 B2	20-04-2000
			AU 2946197 A	05-01-1998
			WO 9747025 A1	11-12-1997
			DE 69715190 D1	10-10-2002
			DE 69715190 T2	30-04-2003
			EP 0902963 A1	24-03-1999
			JP 2000510638 T	15-08-2000
WO 0033350	A	08-06-2000	WO 0033350 A2	08-06-2000
			EP 1135790 A2	26-09-2001